

WHAT IS CLAIMED IS:

1. A seal assembly for a turbine comprising:

first and second generally abutting turbine components;

a sealing plate;

a spring on one side of said sealing plate; one of an abradable coating and a honeycomb seal on an opposite side of said plate;

said spring bearing against said second component and biasing said one of said coating and said honeycomb seal into sealing engagement with said first component.

2. A seal assembly according to claim 1 wherein said one of said abradable coating and said honeycomb seal comprises said abradable coating.

3. A seal assembly according to claim 1 wherein said one of said abradable coating and said honeycomb seal comprises said honeycomb seal.

4. A seal assembly according to claim 1 wherein said spring is preloaded for disposition between said first and second components.

5. A seal assembly according to claim 1 wherein said spring comprises a bellows between opposite sides thereof for biasing said one of said abradable coating

and said honeycomb seal into engagement with said first component.

6. Apparatus for sealing between components of a gas turbine comprising:

a nozzle retaining ring and a turbine shroud for radially overlying turbine buckets, said retaining ring and said shroud having respective first and second surfaces generally abutting one another, said second surface having a recess;

a seal assembly disposed in said recess and including a sealing plate, a spring on one side of said sealing plate and bearing against a base of said recess and one of an abradable coating and a honeycomb seal on an opposite side of said plate from said spring and bearing against said first surface in sealing engagement therewith.

7. Apparatus according to claim 6 wherein said one of said abradable coating and said honeycomb seal comprises said abradable coating.

8. Apparatus according to claim 6 wherein said one of said abradable coating and said honeycomb seal comprises said honeycomb seal.

9. Apparatus according to claim 6 wherein said spring includes a bellows between opposite sides thereof for biasing one of said abradable coating and said honeycomb seal into engagement with said nozzle retaining ring.

10. Apparatus according to claim 6 including means for restraining said spring in a preloaded condition without substantially loading said nozzle retaining ring and said shroud under the bias of said spring; said restraining means being releasable to enable said spring to bias said plate and said one coating and said honeycomb seal into sealing engagement with said first surface in response to an operating parameter of said turbine.

11. A method of sealing between a nozzle retaining ring and a shroud for a gas turbine to minimize or preclude leakage of compressor discharge air into the hot gas path comprising the steps of:

providing a flexible seal assembly between said nozzle retaining ring and said shroud including a plate, a spring on one side of said plate and one of an abradable coating and a honeycomb seal on an opposite side of said plate from said spring;

constraining said spring in a preloaded condition between said nozzle retaining ring and said shroud; and

releasing said constraint to enable said spring to bias said one of said abradable coating and said honeycomb seal against said nozzle retaining ring.

12. A method according to claim 11 including forming a recess in a surface of said shroud in opposition to a surface of said nozzle retaining ring, disposing said seal assembly in said recess in said

preloaded condition and releasing said constraint to bias the one of said abradable coating and said honeycomb seal into sealing engagement with the nozzle retaining ring surface.